

PRELIMINARY DATASHEET

P6550 Portable Airborne Particle Counter

50 LPM



The Airy Technology® P6550 Portable Particle Counter is built for cleanroom monitoring and contamination control. Its patented, feature-rich design enables dynamic environmental monitoring and versatile data reporting and communication options. Measuring particles from 0.5 to 25 μm across six channels at 50 LPM, the P6550 is ideal for aseptic fill, routine monitoring, cleanroom and flow bench validation, recovery testing, filter scanning, troubleshooting, and more.

Real-Time Monitoring technology uniquely allows the P6550 to display data in particles per second, enabling users to quickly pinpoint contamination sources and streamline cleanroom investigations. Standardized hardware and firmware across the Airy Technology® platform simplify training, reduce maintenance complexity, and lower the overall cost of ownership.

Designed with long-term performance in mind, the P6550 include remote diagnostics and are backed by a lifetime warranty, ensuring industry-leading reliability and value. Data can be managed directly on the device or through the free Airy Technology® software, with options to export raw data in .CSV format or generate reports in accordance with ISO 14644-1, EU GMP Annex 1, or FS 209E standards. The P6000 Series can function as a fully portable, battery-operated solution or be easily integrated into building automation and cleanroom management systems with multiple communication options.

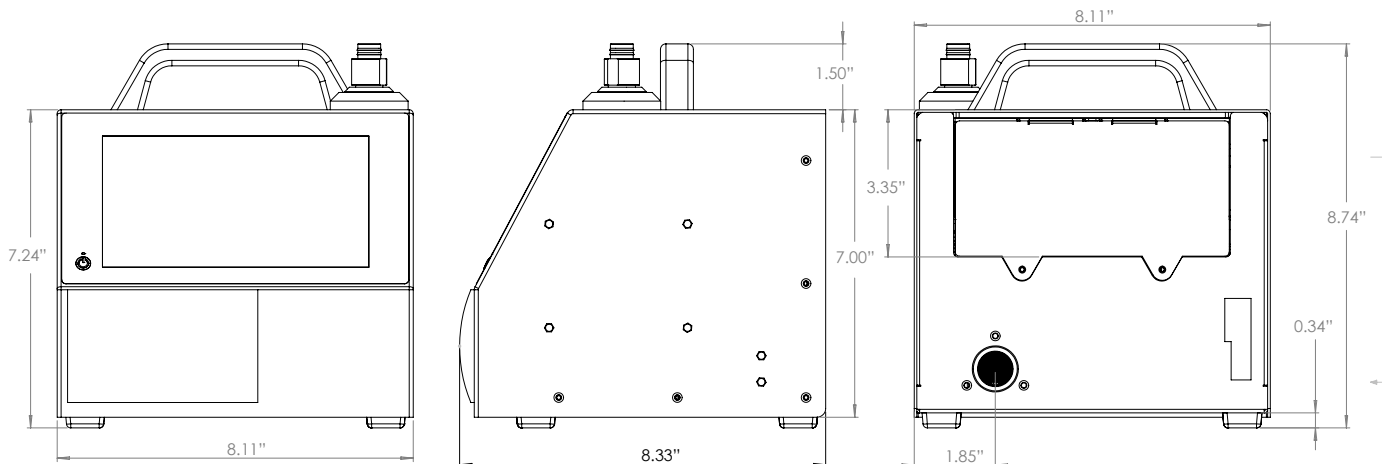
Features and Benefits

- Long life laser diode technology
- Stores up to 45,000 sample records, 1,000 sample locations and 50 recipes
- Annotation function allows user to save 32 character notations to a live sample record
- Resolve issues quickly from any location with internet-enabled remote diagnostics
- Large, intuitive color touch screen display with an easy-to-use icon-driven interface
- Common interface ensures ease of use across all products
- Connect using Ethernet, USB, and Wi-Fi (optional)
- Built-in printer for FDA 21 CFR Part 11 compliance
- Complies with ISO 21501-4 and JIS B9921 standards
- Easy to clean 316L Stainless Steel enclosure with minimal particle traps
- Seamless integration into a facility monitoring system
- 2 Year Limited Warranty (Extended and Lifetime Warranties available)

Specifications

Model	P6550
Size Range	0.5 to 25.0 µm
Size Channels	Factory calibrated at 0.5, 0.7, 1.0, 2.5, 5.0, 10.0 µm variable binning
Flow rates	50 LPM
Concentration Limits	1,055,000 particles/ft ³ @ 10% coincidence (per ISO 21501-4) (as tested and validated ¹)
Battery Run Time	6+ Hours (Continuous use on 4 batteries)
Light Source	Long life laser diode
Counting Efficiency	50% @ 0.5 µm; 100% for particles >0.75 µm per JIS
Zero Count	<1 count per 5 minutes
Count Modes	Real-Time Meter and graph, cumulative/differential count/m ³ and count/ft ³ , and mass concentration (PM)
Count Alarms	1 to 9,999,999 counts
Calibration	NIST traceable
Display	7" (17.78 cm) capacitive touch screens
Printer	Built-in printer
Vacuum Source	Internal pump with automatic flow control
Filtered Exhaust	Internal HEPA filter
Number of Channels	Up to 6 Calibratable Channels
Custom Size Channels	Calibration for custom size channels available
Audible Alarm	Adjustable built-in alarm
Battery	Removable Li-ion
Reports	ISO 14644-1, EU GMP Annex 1, FS 209E
Recipes	50 user-configurable recipes
Communication Modes	Ethernet, USB, and optional 802.11b/g wireless
Alarm	Alarms on counts for all particle sizes, sensor failure, environmental sensors and flow
Standards	ISO 21501-4 and JIS B9921
Calibration	Recommended minimum once per year
External Surface	Stainless Steel
Dimensions (L x W x H)	8.33" x 8.11" x 8.5" (21.2 cm x 20.6 cm x 21.6 cm)
Weight	13.9 lbs (6.3 kg)
Accessories	Operating manual and IMS software on USB flash drive, thermal printer, isokinetic probe, sample tubing, purge filter, (2) batteries, data download software, USB cable, and power supply
Optional Accessories	Printed manual, carrying case, spare battery, external battery charger, barbed fittings, printer paper
Buffer Memory	45,000 sample records (rotating buffer) including particle count data, environmental data, locations, annotations, and times. Scrollable on screen or printout.
Sample Locations	Up to 1,000 locations 20 characters long
Sample Time	1 second to 99 hours
Power	110 to 240 VAC 50/60 Hz universal in-line power supply
Operating Conditions	41° to 104°F (5° to 40°C) / 20% to 95% non-condensing
Storage Conditions	32° to 122°F (0° to 50°C) / Up to 98% non-condensing
Warranty	2 year Limited Warranty (Extended and Lifetime warranties available)

1- Validated by independent analysis see paper available at www.particlesplus.com/aac2022_paper



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